

MAClite 4700

Technical Data Sheet

PRODUCT DESCRIPTION

MAClite 4700 is a tearable reflective film (Commercial Grade) providing wide-angle reflectivity of incident light and giving excellent night and day visibility.

The film consists of a layer of microscopic glass beads of high optical quality embedded in a coloured film and react as lenses. A metallized back provides a mirror surface for reflection.

CONSTRUCTION

Face material :

Reflective film \pm 115 μ m thick.

Adhesive :

High quality clear solvent based permanent acrylic adhesive.

Liner :

Highly stable 150 gsm white polyethylene coated paper.

TYPICAL USES

MAClite 4700 is a marking film designed for 24 h a day eye-catching decoration and identification.

MAClite 4700 can only be applied on flat surfaces.

REFLECTIVITY

At -4° entrance angle and 0.2° observation angle MAClite 4700 has the following typical coefficient of retro reflection (cd/lx/sqm)

Reference	Typical retro reflection
MAClite 4729-00 White	80
MAClite 4709-00 Yellow	50
MAClite 4759-00 Red	14
MAClite 4739-00 Blue	4
MAClite 4749-00 Green	9

DURABILITY

4-5 years.

These use-life estimates are based upon accelerated ageing studies and outdoor exposure, under conditions experienced in vertical exposure and in "normal" temperate climates.

Note : Exposure to severe temperatures and ultraviolet light, as well as conditions in southern European countries, and also in tropical, sub-tropical or desert regions, will cause a more rapid deterioration. This also applies to polluted areas, high altitude, horizontal and south-facing exposure.

SHELF LIFE

1 year when stored at 15 to 25°C and \pm 50 % relative humidity.

PHYSICAL PROPERTIES (Average values)

Thickness (mm) (Film + adhesive) ASTM D-645
0.140

Face Material Data, 23°C DIN 53455

Tensile strength : $>$ 18 N/15mm

Elongation at break : 8 %

Adhesive Data, 23°C FTM 1

Peel adhesion 180° on stainless steel (N/25mm)

20 min. residence : $>$ 15 (reflective film will tear)

Dimensional stability FTM 14

Shrinkage (48 hours at 70°C) : $<$ 0.3 %

(25 cm x 25 cm, sample mounted on aluminium).

Temperature ranges

Application : $+10^\circ\text{C}$ to $+40^\circ\text{C}$

End-use : -20°C to $+90^\circ\text{C}$

Solvent and chemical resistance

Resistant to most oils and grease, fuel, aliphatic solvents, weak acids, salts and alkalis.

PROCESSING

Printing

MAClite 4700 can be printed with some screen inks and varnishes. However assurance of ink performance in all cases should be first obtained from the ink supplier.

Computer cutting

Clean, quick, trouble-free cutting with most plotters.

Application

The transfer of the cut material onto the Application Tape should always be performed by removing the liner from the pressure-sensitive material (i.e. with the film downwards onto the working surface) and not by lifting off the Application Tape.

MAClite 4700 can only be applied on flat surface with the dry or the wet method.

Repositioning of the film is limited.

Important remark

All surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination.

The compatibility of paints and lacquers should be tested by the end-user, prior to use.

Edge sealing and varnishing

Where exposure to chemicals and solvent spillage is likely to occur, edge sealing of decals with a varnish will prevent edge lift. Correct varnishing of decals gives greater protection, and extends the use-life against prolonged effects of weathering, abrasion and other effects such as frequent cleanings.

IMPORTANT NOTICE

All MACTac products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects.

Published information concerning MACTac products is based upon research which the Company believes to be reliable although such information does not constitute a warranty.

Because of the variety of uses of MACTac products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages.

All specifications are subject to change without prior notice.